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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/754,859	01/04/2001	Chad Daniel Fisher	2000-12	4297

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KoSa
4501 Charlotte Park Drive
Charlotte, NC 28217-1979

EXAMINER
SELLERS, ROBERT E

ART UNIT	PAPER NUMBER
1712	6

DATE MAILED: 08/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/754,859	Applicant(s) FISHER, CHAD DANIEL
	Examiner Robert Sellers	Art Unit 1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 May 2002 and 15 July 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) *4 and 8-23* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 5-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Claims 12-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a non-elected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction requirement in Paper No. 3. Claims 8-11 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a non-elected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5. Claim 4 is withdrawn as being directed to a non-elected species of epoxy resin.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent No. 10-25666.

Mixture (A) contains 100 parts by weight of rubber latex, from 2-10 parts by weight of resorcinol-formaldehyde condensate, and from 10-20 parts by weight of epoxy compound which converts to from 8.3% by weight (10 parts by weight of epoxy compound per 120 combined parts by weight) to 16.4% by weight (20 parts by weight of epoxy compound per 122 combined parts by weight) of epoxy compound.

Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Mori et al.

Mori et al. (col. 9, lines 5-9 and Tables 2 and 3) shows an adhesive composition (col. 4, lines 60-63) comprising a rubber latex, a resorcinol-formaldehyde resin, and 4% by weight based on dry solids of sorbitol diglycidyl ether (5 parts by weight solids of epoxy resin per 123.5 parts by weight total solids of latex, resorcinol and formaldehyde, and epoxy compound).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aufdermarsh, Jr., Takata et al., Imai et al. and Japanese Patent Nos. 11-286875, 9-12997, 10-46475, 2000-8280, 62-276091 and 10-212674 in view of Mori et al. and Japanese Patent No. 10-25666.

Aufdermarsh, Jr. (col. 3, lines 49-68), Takata et al. (col. 3, line 66 to col. 4, line 8 and col. 10, lines 4-7), Imai et al. (col. 4, lines 31-53 and col. 21, Table 6 and lines 55-59) and the Japanese patents set forth single-dip adhesives composed of an epoxy resin and a resorcinol-formaldehyde latex containing a rubber. The claimed amount of epoxy resin is not recited.

Mori et al. (col. 2, lines 15-27 and col. 5, lines 32-42) espouses from 1.5-16% by weight (2 parts by weight of epoxy resin/132 parts by weight of combined total solids to 20 parts by weight of epoxy resin/125 parts by weight of combined total solids) to improve the abrasion resistance while maintaining the adhesion of the fibers to the rubber. Japanese '666 teaches the inclusion of from 8.3-16.4% by weight (as calculated hereinabove) of an epoxy resin for "strong adhering power."

It would have been obvious to employ the epoxy resin of Aufdermarsch, Jr., Takata et al., Imai et al. and Japanese '997, '475, '280, '091 and '674 in proportions within the ranges of Mori et al. and Japanese '666 in order to improve the abrasion resistance while maintaining the adhesion of the fibers to the rubber, and to strengthen the adhering power.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aufdermarsh, Jr., Takata et al., Imai et al. and Japanese Patent Nos. 10-25666, 11-286875, 2000-8280 and 10-212674 in view of Japanese Patent Nos. 4-316670 and 8-13346.

The particular species of sorbitol epoxy resin of claim 5 is disclosed in column 6, lines 1-4 and 8-11 of Takata et al. Japanese '670 and '346 show the adhesion of polyester fibers with a blend of sorbitol epoxy resin and latex along with a resorcinol-formaldehyde condensate.

It would have been obvious to employ the sorbitol epoxy resin of Takata et al. and Japanese '670 and '346 as the epoxy resin of Aufdermarsh, Jr., Takata et al., Imai et al. and Japanese '666, '875, '280 and '674 based on the functional equivalence of the epoxy groups emanating from the sorbitol epoxy resin which is embraced by the generic epoxy resin of Takata et al., Imai et al. and Japanese '666, '875, '280 and '674 and its use in an equivalent utility of an adhesive for polyester or polyamide fibers (MPEP § 2144.08(c) and (d)).

(703) 308-2399 (Fax no. (703) 872-9310)
Monday to Friday from 9:30 to 6:00 EST

Robert Sellers
Primary Examiner
Art Unit 1712

rs
8/7/02